AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1.-2. (Canceled)

3. (Currently Amended) An isolated cancer peptide consisting of (a) ~~about 10 contiguous amino acids of SEQ ID NO: 4 that include~~ (i) amino acids 53 ~~55~~-62 of SEQ ID NO: 4, (ii) ~~or~~ amino acids 127-136 of SEQ ID NO: 4, or (iii) a functionally equivalent variant of (i), wherein the functionally equivalent variant has at least 90% sequence identity with amino acids 53-62 of SEQ ID NO: 4, and (b) optionally 1 to about 10 additional contiguous amino acids of SEQ ID NO: 4 at the N-terminus of the cancer peptide, ~~or a functionally equivalent variant thereof, wherein the functionally equivalent variant has at least 85% sequence homology with the cancer peptide,~~ wherein said cancer peptide or functionally equivalent variant ~~is immunologically recognized by~~ stimulates cancer antigen specific cytotoxic T lymphocytes.

4. (Canceled)

5. (Previously Presented) The isolated cancer peptide of claim 3, wherein the cytotoxic T lymphocytes are restricted by a Major Histocompatibility Complex (MHC) molecule.

6. (Previously Presented) The isolated cancer peptide of claim 5, wherein the MHC molecule is an MHC class I molecule.

7. (Previously Presented) The isolated cancer peptide of claim 3, wherein the cancer peptide is derived from a cancer selected from the group consisting of: a non-Hodgkins lymphoma, leukemia, Hodgkins lymphoma, lung cancer, liver cancer, metastases, melanoma, adenocarcinoma, thymoma, colon cancer, uterine cancer, breast cancer, prostate cancer, ovarian cancer, cervical cancer, bladder cancer, kidney cancer, pancreatic cancer and sarcoma.

8. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide is presented by a primary breast tumor cell or by a melanoma cell.

9. (Canceled)

10. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 53-62 of SEQ ID NO: 4.

11. (Canceled)

12. (Previously Presented) The isolated cancer peptide of claim 3, wherein 1 to about 5 additional contiguous amino acids of SEQ ID NO: 4 are present at the N-terminus of the cancer peptide.

13. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 54-62 of SEQ ID NO: 4.

14. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 48-62 of SEQ ID NO: 4.

15. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 43-62 of SEQ ID NO: 4.

16.-25. (Canceled)

26. (Currently Amended) A composition comprising an ~~one or more of the~~ isolated cancer peptides consisting of (a) ~~about 10 contiguous amino acids of SEQ ID NO: 4 that include~~ (i) amino acids 53 ~~55~~-62 of SEQ ID NO: 4, (ii) ~~or~~ amino acids 127-136 of SEQ ID NO: 4, or (iii) a functionally equivalent variant of (i), wherein the functionally equivalent variant has at least 90% sequence identity with amino acids 53-62 of SEQ ID NO: 4, and (b) optionally 1 to about 10 additional contiguous amino acids of SEQ ID NO: 4 at the N-terminus of the cancer peptide, ~~or a functionally equivalent variant thereof, wherein the functionally equivalent variant has at least 85% sequence homology with the cancer peptide,~~ wherein said cancer peptide or functionally equivalent variant ~~is immunologically recognized by~~ stimulates cancer antigen specific cytotoxic T lymphocytes.

27. (Canceled)

28. (Previously Presented) An immunogen comprising the composition of claim 26 alone or in combination with at least one immunostimulatory molecule, wherein the immunogen elicits a response by an antigen specific T lymphocyte.

29. (Previously Presented) The immunogen of claim 28, wherein the immunostimulatory molecule is an MHC molecule.

30.-66. (Canceled)

67. (Previously Presented) The isolated cancer peptide of claim 6, wherein the MHC class I molecule is selected from the group consisting of HLA-A31, HLA-A3, HLA-A11, HLA-A33, and HLA-A68.

68. (Previously Presented) The isolated cancer peptide of claim 67, wherein the MHC class I molecule is HLA-A31.

69. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 53-62 of SEQ ID NO: 4 except that amino acid 54 of SEQ ID NO: 4 is substituted with a different amino acid.

70. (Previously Presented) The isolated cancer peptide of claim 69, wherein the different amino acid is threonine.

71. (Previously Presented) The isolated cancer peptide of claim 69, wherein the different amino acid is selected from the group consisting of alanine, isoleucine, valine, and leucine.

72. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 54-62 of SEQ ID NO: 4 and an additional amino acid at the N-terminus of the cancer peptide.

73. (Previously Presented) The isolated cancer peptide of claim 72, wherein the additional amino acid is valine or threonine.

74. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 52-62 of SEQ ID NO: 4.

75. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 51-62 of SEQ ID NO: 4.

76. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 50-62 of SEQ ID NO: 4.

77. (Previously Presented) The isolated cancer peptide of claim 3, wherein the isolated cancer peptide consists of amino acids 49-62 of SEQ ID NO: 4.

78.-82. (Canceled)

83. (Previously Presented) The immunogen of claim 29, wherein the MHC molecule is a MHC Class I molecule.

84. (Previously Presented) The immunogen of claim 83, wherein the MHC Class I molecule is selected from the group consisting of HLA-A31, HLA-A3, HLA-A11, HLA-A33, and HLA-A68.

85. (Previously Presented) The immunogen of claim 83, wherein the MHC Class I molecule is HLA-A31.

86. (Canceled)

87. (Previously Presented) The isolated cancer peptide of claim 3, wherein the cancer peptide is about 10 amino acids in length.

88. (Previously Presented) An isolated cancer peptide consisting of a portion of SEQ ID NO: 4, wherein the portion consists of (i) amino acids 55-62 of SEQ ID NO: 4; (ii) amino acids 127-136 of SEQ ID NO: 4; (iii) amino acids 53-62 of SEQ ID NO: 4; (iv) amino acids 54-62 of SEQ ID NO: 4; (v) amino acids 48-62 of SEQ ID NO: 4; (vi) amino acids 43-62 of SEQ ID NO: 4; (vii) amino acids 52-62 of SEQ ID NO: 4; (viii) amino acids 51-62 of SEQ ID NO: 4; (ix) amino acids 50-62 of SEQ ID NO: 4; (x) amino acids 49-62 of SEQ ID NO: 4; (xi) amino acids 53-62 of SEQ ID NO: 4 in which amino acid 54 is substituted with a different amino acid; or (xii) amino acids 54-62 of SEQ ID NO: 4 and an additional amino acid at the N-terminus of amino acids 54-62; wherein said cancer peptide is immunologically recognized by antigen specific cytotoxic T lymphocytes, wherein the antigen is an epitope of a protein having the amino acid sequence of SEQ ID NO: 4.

89. (Previously Presented) The isolated cancer peptide of claim 88, wherein the different amino acid is threonine.

90. (Previously Presented) The isolated cancer peptide of claim 88, wherein the different amino acid is alanine, isoleucine, valine, or leucine.

91. (Previously Presented) The isolated cancer peptide of claim 88, wherein the additional amino acid is valine or threonine.

92. (Previously Presented) The isolated cancer peptide of claim 88, wherein the cytotoxic T lymphocytes are restricted by an MHC molecule.

93. (Previously Presented) The isolated cancer peptide of claim 92, wherein the MHC molecule is an MHC class I molecule.

94. (Previously Presented) The isolated cancer peptide of claim 93, wherein the MHC class I molecule is selected from the group consisting of HLA-A31, HLA-A3, HLA-A11, HLA-A33, and HLA-A68.

95. (Previously Presented) The isolated cancer peptide of claim 94, wherein the MHC class I molecule is HLA-A31.

96. (Previously Presented) The isolated cancer peptide of claim 88, wherein the cancer peptide is derived from a cancer selected from the group consisting of a non-Hodgkins lymphoma, leukemia, Hodgkins lymphoma, lung cancer, liver cancer, metastases, melanoma, adenocarcinoma, thymoma, colon cancer, uterine cancer, breast cancer, prostate cancer, ovarian cancer, cervical cancer, bladder cancer, kidney cancer, pancreatic cancer and sarcoma.

97. (Previously Presented) The isolated cancer peptide of claim 88, wherein the isolated cancer peptide is presented by a primary breast tumor cell or by a melanoma cell.

98. (Previously Presented) A composition comprising one or more of the isolated cancer peptides of claim 88.

99. (Previously Presented) An immunogen comprising one or more of the isolated cancer peptides of claim 88, alone or in combination with at least one immunostimulatory molecule, wherein the immunogen elicits a response by an antigen specific T lymphocyte.

100. (Previously Presented) The immunogen of claim 99, wherein the immunostimulatory molecule is an MHC molecule.

101. (Previously Presented) The immunogen of claim 100, wherein the MHC molecule is an MHC Class I molecule.

102. (Previously Presented) The immunogen of claim 101, wherein the MHC Class I molecule is selected from the group consisting of HLA-A31, HLA-A3, HLA-A11, HLA-A33, and HLA-A68.

103. (Previously Presented) The immunogen of claim 102, wherein the MHC Class I molecule is HLA-A31.